

## **REMARKS**

In the Official Action mailed on **27 June 2005**, the Examiner reviewed claims 1-48. Applicant was required to update paragraph [0002] of the specification to include the current serial number, filing date, etc. of the co-pending application. On page 3, line 12, "benefits" needed to be changed to "benefit". Claims 1-48 were rejected under 35 U.S.C. §112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to gap between the necessary structural connections. Claims 1-3, 17-19 and 33-35 were rejected under 35 U.S.C. §103(a) as being unpatentable over Gee et al. (hereinafter Gee) (US 6,374,286 B1) in view of Sandage et al. (hereinafter Sandage) (US 5,414,848).

### **Required updates and changes to the specification**

Applicant was required to update paragraph [0002] of the specification to include the current serial number, filing date, etc. of the co-pending application. Applicant submits herewith an updated paragraph [0002], which includes the current serial number 10/043,801 and filing data January 10, 2002 of the co-pending application.

On page 3, line 12, "benefits" needed to be changed to "benefit". Applicant submits herewith an updated paragraph [0006], which reads "can benefit from" which replaces "can benefits from".

These updates and changes therefore address the required updates and changes to the specification.

### **Rejections under 35 U.S.C. §112**

Claims 1-48 were rejected under 35 U.S.C. §112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to gap between the necessary structural

connections. The omitted structural cooperative relationships are: how the null and non-null pointer values have anything to do with the class initialization barrier guaranteeing that a class is initialized before the class is first used by a program (in claims 1, 17, and 33). Furthermore, the Examiner avers that there is no relationship made between the class initialization barriers described in the preamble to the limitations described in the body of claim 1.

Applicant respectfully points out that in the instant application, a class loaded by a task is associated with an initialized entry in a task class mirror table. More specifically, a null pointer value in the initialization entry in the task class mirror table for the loaded class by the task **“indicates that the task has loaded the class but has not initialized it yet”** (paragraph [0039]). Furthermore, a class initialization barrier **“determines if a class has been initialized for a specific task by examining the initialized entry of the class’s task class mirror table for this task, as described above. If the pointer at that entry is null, multitasking virtual machine calls some runtime function that initializes the class on behalf of the task,”** (paragraph [0040]). This **guarantees that a class is initialized before the class is first used by a program.** Next, **“the initialization completes by setting the initialized entry of task class mirror table 302 to a pointer 308 to the task class mirror 304 for this task.”** In so doing, the null-pointer value is set to a non-null pointer value, and **“a non-null pointer value indicates that the class has been initialized, and control is transferred to code that load the class variable.”** (paragraph [0043]). Therefore the non-null pointer value **“prevents subsequent executions of the class initialization barrier by the task from calling multitasking virtual machine 102’s runtime to initialize the class.”** (paragraph [0040]).

Accordingly, Applicant has amended independent claims 1, 17, and 33 to clarify how the null and non-null pointer values are associated with the class initialization barrier guaranteeing that a class is initialized before the class is first used by a program. These amendments find support on page 3, lines 14-16, on

page 12, lines 3-5 and lines 7-18, and on page 13, lines 23-25 of the instant application.

**Rejections under 35 U.S.C. §103 (a)**

Claims 1-3, 17-19 and 33-35 were rejected as being unpatentable over Gee et al. (hereinafter Gee) in view of Sandage et al. (hereinafter Sandage).

Applicant has amended independent claims 1, 17 and 33 to include the limitations from dependent claims 2 and 4 into claim 1, dependent claims 18 and 20 into claim 17, and dependent claims 34 and 36 into claim 33, thereby including the allowable subject matter from dependent claims 4, 20, and 36 into independent claim 1, 17, and 33, respectively. Dependent claims 2, 4, 18, 20, 34, and 36 have been cancelled without prejudice.

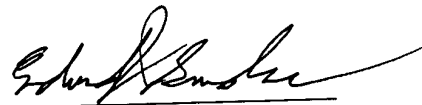
Hence, Applicant respectfully submits that independent claims 1, 17, and 33 as presently amended are in condition for allowance. Applicant also submits that claims 3, 5-16, which depend upon claim 1, claims 19, 21-32, which depend upon claim 17, and claims 35, 37-48, which depend upon claim 33, are for the same reasons in condition for allowance and for reasons of the unique combinations recited in such claims.

**CONCLUSION**

It is submitted that the present application is presently in form for allowance. Such action is respectfully requested.

Respectfully submitted,

By



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